

## Woodland Management System

*A planned system to maintain or improve woodland for production of timber, wood products and recreation.*

- Increases timber, pulpwood and fuel production
- Reduces soil erosion
- Protects long-term productivity
- Enhances wildlife habitat and beautifies landscape



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*A planned system to retain, create or manage food, cover and water for wildlife habitat.*

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- Attracts wildlife
- Adds to natural beauty of landscape
- Effective use of nonproductive land



**For further information contact your local Soil Conservation Service or Conservation District office.**

All programs of the U.S. Department of Agriculture are available to everyone without regard to race, creed, color, sex, age, handicap or national origin.



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# Farmland Conservation Guide

## Ideas for Improving Your Land



## The Future of Your Land

Your farm is a big investment — buildings, equipment, livestock and land. Good management of these assets means increased production and profits. Improving land resources can bring immediate returns while assuring long-term productivity.

The most serious land-related problem facing farmers today is soil erosion. A recent SCS study shows that topsoil is being depleted faster than it can be replaced on much of the State's cropland. Eroded soils cause poorer stands and higher production costs — decreasing net in-

come. Erosion also causes the loss of valuable nutrients. Farming subsoil takes more fuel and fertilizer than farming topsoil.

This guide shows a variety of conservation practices which can be used to reduce erosion and improve the land's productivity. A single conservation practice may not solve all erosion problems on a field. Usually, a combination of practices is more effective.

Each farm is different — in terms of type of operation, financial resources available, soil types, slope lengths and steepness, etc. This means that a field by field analysis of each individual farm is the best ap-

proach to planning a land resource management system.

SCS conservationists can help evaluate which conservation practices are best suited for each farm and individual operation. Once you decide on which practices to include in your resource management system, SCS, through conservation districts, can provide technical help to design and install these practices. In addition, cost sharing for installing some conservation practices may be available from your local Agricultural Stabilization and Conservation Service office.







## Crop Rotations

*Crops grown in rotation to maintain or improve soil productivity and fertility.*

- Reduces soil erosion
- Helps control weeds, disease and insects
- Improves or maintains good physical condition of the soil



## Contour Farming

*Conducting field operations such as tilling, planting, cultivating and harvesting on the contour.*

- Reduces soil erosion
- Conserves water
- Cuts fuel consumption
- Most effective when used with conservation tillage, stripcropping, and/or terracing



## Conservation Tillage

*Any tillage or planting system that maintains at least 30 percent of the soil surface covered by plant residue.*

- Reduces soil erosion
- Improves soil aeration, tilth and permeability
- Saves fuel and time
- Conserves soil moisture
- Improves wildlife habitat



## Cover Cropping

*Crop of close growing grasses, legumes, or small grain grown primarily for seasonal protection and soil improvement.*

- Reduces soil erosion
- Increases organic matter
- Improves aeration, infiltration, and tilth
- Provides wildlife habitat



## Stripcropping

*Alternating strips of grass or close-growing crops with cultivated crops on the contour or across the general slope.*

- Conserves water, soil and fertilizer
- Increases cover variety for wildlife
- Cuts fuel consumption

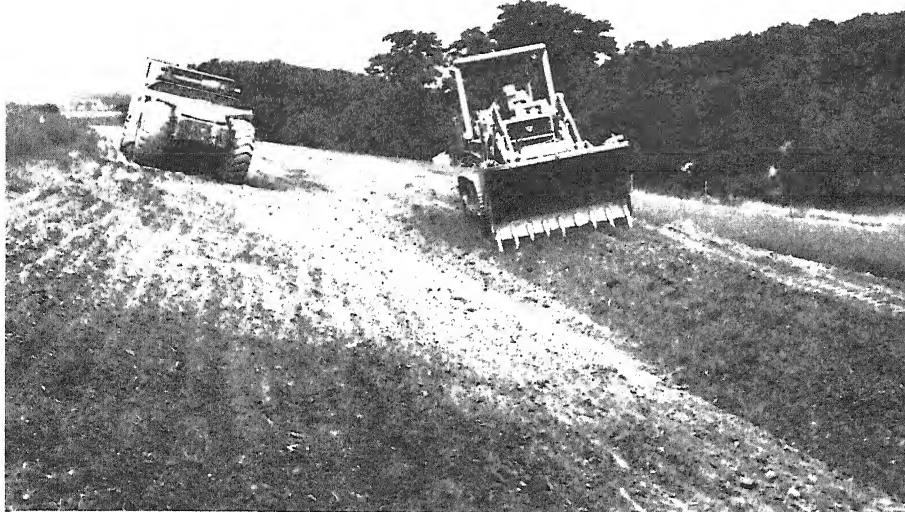


## Grassed Waterways

*A natural or constructed waterway or outlet that is vegetated and is used for the safe disposal of water runoff.*

- Helps prevent or heal gullies
- Provides outlet for diversions and terraces
- Provides nesting areas and cover, and travel lanes for wildlife
- Works well with conservation tillage, terraces, contour farming and stripcropping





## Diversions

*A grassed channel with a supporting ridge on the lower side constructed across the slope to divert water runoff.*

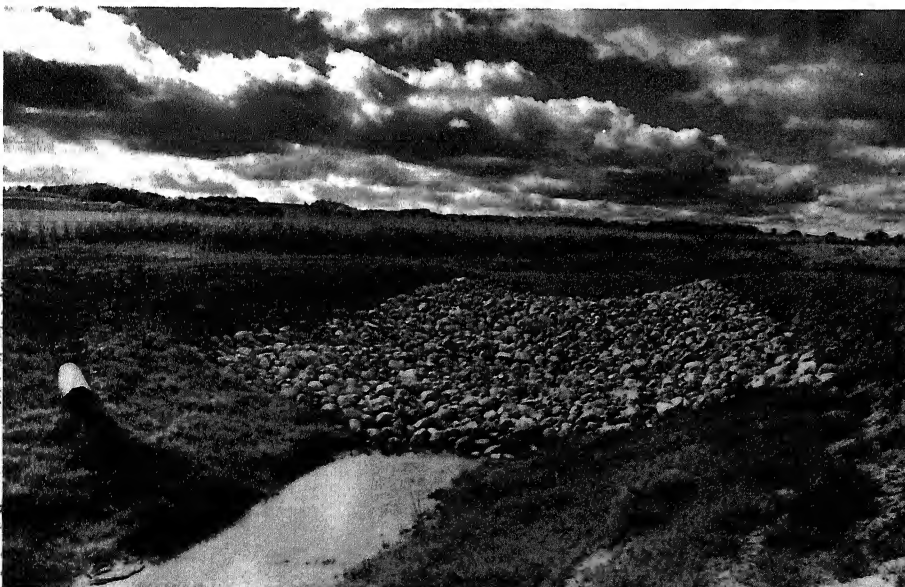
- Prevents gullies
- Reduces soil erosion
- Diverts excess water runoff to safe outlets
- Cover may be used for hay or silage
- May be used on steep slopes



## Terraces

*An embankment, channel, or combination ridge and channel constructed across the slope to intercept and store water runoff.*

- Reduces soil erosion
- Permits more intensive use of cropland
- Improves soil moisture
- Works well with contour farming
- Not suited to steep land
- Aids surface water management



## Drainage

*A buried pipe or other conduit, or an open ditch to carry off excess surface water or ground water.*

- Removes excess water
- Increases crop yields
- Allows earlier planting
- Makes harvesting easier and more flexible
- Improves soil conditions

## Pasture Management System

*Managing forages for maximum feed production for livestock through planting, liming, fertilization, brush control, species selection and grazing rotation.*

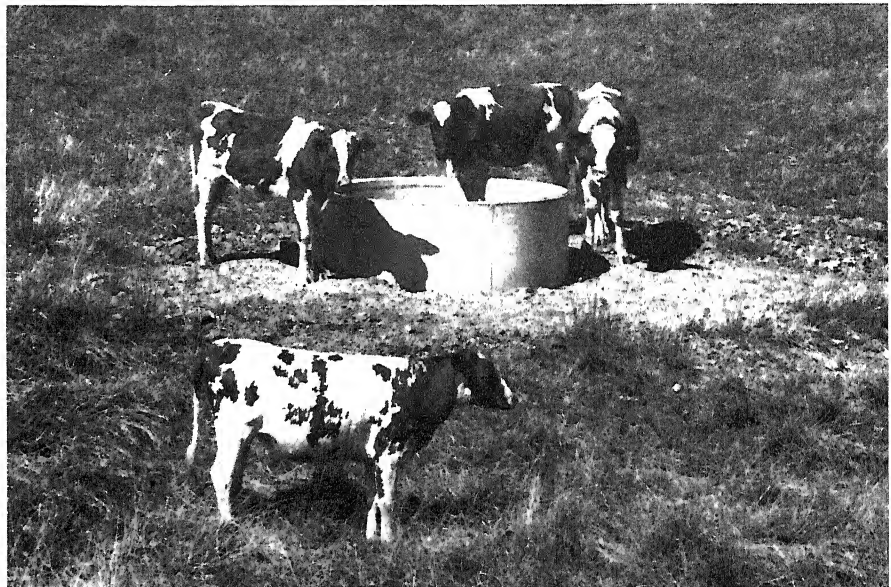
- Reduces soil erosion
- Increases forage production
- Makes use of poorer quality land
- Provides year-round forage



## Livestock Watering Facility

*A trough or tank installed to provide livestock water supplies from a spring, pond, well or other source.*

- Permits piping of water to rotational pastures
- Provides clean water supply for livestock
- Improves forage utilization through distribution of grazing



## Windbreaks

*A strip or belt of trees or shrubs established within or next to a field, farmstead, or feedlot.*

- Prevents wind erosion
- Protects farmstead, livestock and crops
- Saves energy, reduces heating costs
- Reduces snow blowing
- Increases natural beauty
- Provides wildlife cover







## Waste Management System

*A planned system for managing liquid and solid waste including runoff from concentrated areas. May include waterways, diversions, fencing, filter strips, drainage, roof runoff management, waste storage facilities and waste utilization.*

- Recycles wastes
- Improves herd health
- Source of plant nutrients
- Improves water quality
- Reduces fertilizer needs



## Waste Storage Facility

*A fabricated structure or constructed impoundment for temporary storage of animal or other agricultural wastes.*

- Reduces fertilizer needs
- Eliminates need for daily spreading
- Conserves nutrient value of manure
- Eliminates need to spread on frozen or wet soils
- Allows for timely spreading for maximum plant growth



## Waste Application

*Proper application of agricultural or other waste on cropland to improve soil and plant resources.*

- Reduces fertilizer needs
- Increases crop yields
- Safeguards water quality
- Improves soil structure

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